CLAIM AMENDMENTS

1. (Currently amended) Method for assembling insulating glass panes that are filled with a gas different from air, by

- arranging a first glass sheet and a second glass sheet, provided with a spacer, in a vertical or inclined position so that they are positioned one opposite to the other, to form a glass sheet arrangement having a bottom edge and two upright edges, without the first glass sheet being in contact with the spacer,
- forming a chamber that encloses a space between the glass sheets, by providing a belt at the bottom ~~lower~~ edge of the glass sheet arrangement and at least one seal beside each of the upright edges of the glass sheet arrangement, which seal extends from a point above the belt down to the belt,
- introducing a gas different from air into the chamber from below and closing the insulating glass pane by approaching the glass sheets one to the other once a desired filling grade or filling level has been reached,

wherein one of the two glass sheets is held at a spacing from the belt during introduction of the gas different from air and that

the gas different from air is introduced into the chamber through a gap between the belt and the lower edge of said one glass sheet while the latter is kept in spaced arrangement.

2. (Previously presented) The method as defined in Claim 1, wherein the belt has an upper run and is used as a conveying element of the horizontal conveyor.

3. (Previously presented) The method as defined in Claim 2, wherein the method is carried out between two plates, which can be varied with respect to their spacing one from the other, in a vertical gas-filling and assembly device for insulating glass panes, where the horizontal conveyor, using the belt as a conveyor element, is arranged in the neighborhood of the lower edge of the plates,

that the glass sheets are conveyed into the space between the plates, standing on the belt in an upright position and leaning against one of the plates,

that the glass sheets are arranged one opposite the other between the two plates,

that the chamber is delimited by the glass sheets, the plates, the belt and at least two movable seals, which latter are spaced one from the other in the conveying direction,

by providing at least one of the seals in front of the glass sheet arrangement and at least one of the seals behind the glass sheet arrangement, and
that a gap is formed between the belt and the lower edge of one of the two glass sheets before the gas different from air is supplied.

4. (Previously presented) The method as defined in Claim 3, wherein the spacing between the lower edge of said one glass sheet and the belt is formed by lifting said glass sheet off the belt.

5. (Previously presented) The method as defined in Claim 1, wherein the spacing between the lower edge of said one glass sheet and the belt is formed by pivoting the belt away from the lower edge of said one glass sheet.

6. (Previously presented) The method as defined in claim 1, wherein the glass sheets are arranged in registration and one opposite the other.

7. (Previously presented) The method as defined in claim 1, wherein the glass sheets are arranged in parallel one to the other before the gas different from air is supplied.

8. (Previously presented) The method as defined in claim 1, wherein the first glass sheet is lifted off the belt.

9. (Previously presented) The method as defined in Claim 3 wherein both glass sheets are in surface contact with the plates.

10. (Previously presented) The method as defined in Claim 3, wherein the gas different from air is supplied through that plate on which the first glass sheet is positioned.

11. (Previously presented) The method as defined in Claim 10, wherein the gas exits through the bottom of that plate.

12. (Previously presented) The method as defined in Claim 10 wherein the spacer is initially attached to the second glass sheet.

13. (Previously presented) The method as defined in Claim 3 wherein only one of the plates is movable and the gas different from air is supplied through the movable plate.

14. (Previously presented) The method as defined in Claim 3, wherein the plates are arranged in inclined position relative to the belt.

15. (Previously presented) The method as defined in Claim 14, wherein the upper run of the belt is provided in horizontal arrangement transverse to the conveying direction.

16. (Previously presented) The method as defined in Claim 3, wherein for arranging the glass sheets between the plates, the upper run of the belt is initially positioned at a right angle or nearly at a right angle relative to the two plates, and is then pivoted, before the gas different from air is supplied, at an acute angle in downward direction about an axis extending in parallel to the conveying direction.

17. (Previously presented) The method as defined in Claim 3, wherein the plates are initially arranged in V form, whereafter the first and the second glass sheet are conveyed into the space between the plates in V arrangement, and are positioned in V form and held on the plates one opposite the other,
that thereafter one of the plates is approached to the other plate by pivoting it about an axis parallel to the conveying direction, the position of the axis being selected in such a way that the glass sheet retained on the plate to be pivoted is lifted off the belt.

18. (Previously presented) The method as defined in Claim 17, wherein the plate is pivoted until it occupies a parallel position relative to the opposite plate.

19. (Previously presented) The method as defined in Claim 17, wherein the pivoting plate is additionally displaced in parallel and vertically to itself.

20. (Previously presented) The method as defined in Claim 19, wherein the pivoting plate is displaced in parallel to itself only after having been pivoted into a position parallel to the opposite plate.

21. (Previously presented) The method as defined in Claim 17 wherein the position of the axis, about which the one plate is pivoted, is selected in such a way that it lies below, instead of above, the upper run of the belt.

22. (Previously presented) The method as defined in Claim 17, wherein in their initial position in V form of the plates the upper run of the belt is arranged, relative to the plates, so that it encloses with both plates an angle greater than 90°.

23. (Previously presented) The method as defined in Claim 22, wherein in its initial position in V form the upper run of the belt encloses with the two plates angles of equal size.

24. (Currently amended) The method as defined in Claim 23, wherein the ~~geometric~~ angle is selected to be between 95° and 100°

25. (Previously presented) The method as defined in Claim 3, wherein two or more than two glass sheet pairs are arranged between the plates at equal distance one behind the other and are simultaneously filled with the gas different from air and joined to form insulating glass panes.

26. (Previously presented) The method as defined in Claim 25, wherein the two or more than two glass sheet pairs are arranged in V form and in pairs one opposite the other, wherein said glass sheet pairs are initially outside of the space defined by the plates and are subsequently transferred into the space between the plates in said arranged form.

27. (Previously presented) The method as defined in Claim 26, wherein the two or more than two pairs of glass sheets are transferred into the space between the plates simultaneously.

28. (Previously presented) The method as defined in Claim 2, wherein the upper run of the belt is supported over its length.

29. (Currently amended) Device for assembling insulating glass panes that are filled with a gas different from air,

comprising two plates, each plate having a lower edge and a bottom surface, wherein said plates can be varied with respect to their relative spacing,
comprising a horizontal conveyor, which uses a belt as a conveying element, arranged near a lower edges of the plates,
comprising at least two seals which extend from an upper run of the belt to a point located above the belt and which are spaced one from the other in the conveying direction of the belt, at least one of the seals being active between the two plates
and at least one of the plates being provided with means for holding a glass sheet on the plate,
wherein the at least one plate and the belt can be moved one relative to the other in such a way that the lower edge of a glass sheet, being held on the plate , can be brought into a position spaced from the belt
and that means are provided for supplying the gas different from air through the gap between the belt and the lower edge of the glass sheet held in the spaced position.

30. (Previously presented) The device as defined in Claim 29, wherein the belt is capable of being pivoted about an axis parallel to its conveying direction.

31. (Previously presented) The device as defined in Claim 29, wherein the plate, by means of which the spacing of the first glass sheet from the belt can be established, can be moved relative to the other plate and that the first glass sheet can be lifted off the belt by the movable plate on which it is retained.

32. (Previously presented) The device as defined in Claim 29, wherein the means for supplying the gas different from air are provided on or in one of the plates.

33. (Previously presented) The device as defined in Claim 32, wherein the gas different from air can be supplied through that movable plate on which the first glass sheet is arranged.

34. (Previously presented) The device as defined in Claim 32, wherein one or more exit openings for the gas are provided at the bottom surface of that plate.

35. (Previously presented) The device as defined in Claim 29, wherein a channel, extending in the conveying direction and being subdivided into separate sections, is provided for

supplying the gas different from air, that the gas can be separately supplied to the sections of that channel and that each section of the channel communicates with an exit opening and such exit openings are located near the gap between the belt and said one glass sheet.

36. (Previously presented) The device as defined in Claim 29, wherein a channel, extending in the conveying direction, is provided for supplying the gas different from air and that branch ducts, that can be shut off separately, lead from that channel to exit openings arranged near the gap between the belt and said glass sheet.

37. (Previously presented) The device as defined in Claim 32, wherein exit openings for the gas are arranged between a front surface of the plate and a seal provided on the bottom surface of the plate which extends in lengthwise direction and is directed against the belt.

38. (Previously presented) The device as defined in Claim 29, wherein a longitudinally extending seal is provided on the bottom surface of each of the plates (1a, 2a), between the two plates and the belt or a rail supporting the belt.

39. (Currently amended) The device as defined in Claim 29, wherein the upper run of the belt is supported by a rail over its length, which rail is connected solidly and in gastight fashion with one of the plates, said plate being a stationary plate.

40. (Previously presented) The device as defined in Claim 29, wherein the upper run of the belt is supported by a rail over its length, which rail projects laterally beyond the belt and carries on at least one side of the belt a seal which is directed against the bottom surface of a plate.

41. (Previously presented) The device as defined in Claim 37, wherein the seals consist of hoses.

42. (Previously presented) The device as defined in Claim 41, wherein the hoses can be inflated.

43. (Previously presented) The device as defined in Claim 32, wherein the plate, through which the gas different from air is supplied, comprises a slide between two exit openings for independently supplying the gas different from air, which slide extends transversely to the conveying direction from the surface of the plate to a longitudinally extending seal and can be displaced in a downward direction toward the belt.

44. (Previously presented) The device as defined in Claim 29, wherein among the seals, extending from the upper run of the belt to a point above the belt, a plurality of seals are provided in spaced relationship in vertical slots of one of the plates and can be moved into contact with the opposite plate individually and independently one from the other.

45. (Previously presented) The device as defined in Claim 44, wherein among the seals, extending from the upper run of the belt to a point above the belt, a plurality of seals are provided in spaced relationship in vertical slots of one of the plates and can be moved into contact with the opposite plate individually and independently one from the other, and

wherein the seals arranged in the slots of the one plate are positioned opposite slides provided in the opposite plate.

46. (Previously presented) The device as defined in Claim 44, wherein the seals arranged in the slots of the one plate are strips that can be displaced in transverse direction.

47. (Previously presented) The device as defined in Claim 46, wherein the strips have a lower end carrying a brush with downwardly directed bristles.

48. (Previously presented) The device as defined in Claim 29, wherein among the seals, which extend in upward direction from the upper run of the belt, one seal is provided on one of an end of the two plates.

49. (Previously presented) The method as defined in claim 17, wherein the two or more than two glass sheet pairs are arranged in V form and in pairs one opposite the other already outside of the space defined by the plates, and are transferred into the space between the plates in that arrangement.

50. (Previously presented) The device as defined in claim 44, wherein the seals arranged in the slots of the one plate are positioned opposite the slides provided in the opposite plate.